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Honorable Dennis Archer  
Mayor  
City of Detroit

April 17, 1998

Honorable Mayor Archer:

We have completed our diagnostic benchmarking of the City. As you know, we only surveyed functions for which we had existing relevant benchmark information in our database. We received excellent cooperation from most departments. As you expected, there are areas of opportunity for the City to modify its resource allocations to better serve your constituents. While we intended to only address staffing issues, we did observe 2-3 areas of opportunity regarding City revenues that we thought you might wish to consider. As you know, we have reviewed these findings in greater depth with the departments involved.

Attached as appendices are four lists which summarize our findings. The first summarizes the magnitude of the opportunities that may be available. Attachment II comprises a list of the ten departments in which our initial data comparison would indicate there are the greatest opportunities for modifying your current resource allocations. This also identifies the activities within each department which show the most opportunity. Attachment III is a list of those areas in which, according to our comparisons, Detroit is already at the forefront of cost-effective operations. Finally, Attachment IV lists where you differ from most large cities in terms of services you provide, approaches to providing City services, and/or how you organize or fund the activity.

All of these findings are diagnostic only. You will need to perform a more in-depth analysis in each of the highlighted areas before you will know the amount, if any of the opportunity actually presented by that area. As we have indicated from the beginning, this information is a broad comparison of productivity at the operating unit level. It does not represent an analysis of any individual activity in enough depth to determine how the City differs from comparable cities, or how you might best improve an



area. With that caveat, the following is an executive level summary of our findings.

#### **A. What We Studied & What We Found**

The total City budget is nearly \$2.4 billion. We had benchmarking information for some of the activities of Departments with budgets of about \$1.8 billion. The information submitted allowed us to assess Departments constituting about 73% of the total City budget. These assessments were limited to the functions for which we had benchmark information in our existing database. From our preliminary assessment, we believe that the areas we did assess have about 11% of resources devoted to activities which you may wish to analyze in greater depth. Over 1,000 civilian and many sworn positions may be assigned to activities which you could reassign if detailed analysis confirms our preliminary findings. If those assessments confirm our preliminary findings, you may choose to make changes in several of those activities. These conclusions are very preliminary and only indicative of differences from how, on a per transaction basis, other cities staff various functions.

We also believe that you have some opportunities in the area of revenue alternatives. While approaches differ between cities, it is typical for citizens in most communities in America to pay directly (be billed for) the costs of service for refuse collection. Because Detroit does not charge for this service, you are left with an unusually high demand on the property tax in comparison with cities which have a refuse collection charge. In Detroit's case, this is a significant impact. Also, the collection rates for property taxes and emergency medical service (EMS) charges are lower than other cities nationally.

It is important to understand what benchmarking does for you and what it does not achieve by itself. Benchmarking tells you where the resources allocated to an activity differ from what others provide on a per unit of activity supported basis. By itself, this does not indicate that you should make a change, as you may want (and/or your community may need) a different level of service. In our information about Detroit, for example, health services to children shows a significant difference on a per capita basis, but that may well be appropriate if the need level is also much greater. Benchmarking also does not tell you how to become more efficient or productive in an area. The more detailed labor/management study team best practices analyses, management audits, re-engineering, or other techniques are needed to accomplish that more refined objective.



## **B. Areas of Major Opportunity for Re-Thinking How Services Are Provided**

Most of the large opportunities from a cost perspective involved the largest departments. We believe that the combined activities of Police, Water & Sewer, and Transit each may offer potential for re-allocation of over \$30 million each. Your employee benefits package as a whole appears to differ from the norm by a similar amount. The Departments of Public Works and Fire may offer smaller but sizable opportunities. These are described in summary below.

### **Police**

As you know, the Police Department is undergoing a re-structuring process and that process may well address some of the issues outlined herein. Police response time is very poor and yet our preliminary analysis shows that they may have far too many resources devoted to field operations for the number of calls-for-service they support. We do not know, without further study, how to reconcile the slow response time with the apparent excess of field resources. Response time is just one measure of police effectiveness and community policing approaches have made its use as an overall measurement tool somewhat misleading. However, the City seems to be focusing on it and it is longer than desirable.

The dispatch operation seems quite efficient from a staffing and technology standpoint. In our experience, long dispatch delays occur primarily when there is not a near-by assignable resource. Right now, each officer is dispatched to an average of 239 calls per year (1.3/day). With a 50% free patrol and officer initiated time objective, officers elsewhere average around 650 calls per year. Two person cars account for some of the difference, although they are normally not twice as inefficient as one officer cars.

A poor beat assignment plan or assignment of staff to the wrong days or shifts is also a possible culprit. It may also be that you are simply spending significantly more officer time on-scene per call than the typical department, more time writing up your reports, or some other element of activity is consuming more of the officers' time than it does in other cities. Finally, many community policing approaches have succeeded in preventing crime from occurring in the first place, but remove officers from scout car response duties. Clearly crime rates are down and we have



not assessed the interplay between your various enforcement/prevention activities to determine if higher response times may be appropriate due to re-direction toward prevention. However, the basic resources appear to be in place to make a substantial improvement in police effectiveness (including response times) without the additional resources one would normally expect to be required.

A second element of staffing which looks out of line is investigations. With 778 investigative staff and only 100,000 Part I crimes. The standard is 450-650 Part I crimes per "reactive" investigator. Assuming that only 80% of your investigative staff is "reactive", you are only averaging around 161 Part I crimes per investigator. This is obviously well below the norm. However, because our figures are very rough and we do not have actual investigator assignments, you will need to assess this area further to determine the level of potential changes and the actual changes which need to be made to improve competitiveness in this area of operations.

In contrast, our comparative statistics show the City doing much better than average in its Lab staffing, R&I staffing, and communications center staffing. You will need to examine in detail which of the opportunities for resource re-allocation outlined above will be resolved as a result of the current efforts underway within the Department. Then you can determine what additional analytic or other support is most warranted to help this department.

#### **Department of Water & Sewer**

We had comparable data for several different elements of this department. We did not have any for treatment plant operations. We have been told by management that it is their opinion that plant operations is an area of potential improvement. We could not assess it because to do so would require a benchmarking of plants with similar design - something our existing database does not include. In water maintenance operations, the standard for miles of water main maintained per FTE was 18-22, while Detroit was 5.2. This is a \$17-18 million difference if it is confirmed. We examined sewer maintenance and cleaning from two perspectives and concluded that \$3-8 million more resources were devoted here than may be needed. Both of these systems support comparatively older lines than our panel cities, so some resources beyond the average would be expected. We also examined the customer service function from two perspectives - calls/representative and accounts per representative. From both



perspectives this function has about \$4 million more in resources than the typical panel city.

Some smaller areas of the Department also appeared to have opportunities worth further exploration. The meter repair activity had one FTE per 3,400 meters while our panel cities median/average was 10,600-11,100 per FTE. This is a \$2 million issue. Meter reading, done quarterly, has a 44 person staff which reads 126 meters per day per meter reader. The average/median of the panel cities is 277-323/day/meter reader. This is an \$800-900,000 opportunity. In an urban setting like Detroit, the number of potential reads/day/reader may be even higher. Also, technology can eliminate this entire activity if the capital investment proves worthwhile. If you do not improve productivity here, automation is likely to be the result - eliminating all of these jobs. Two other small opportunities - catch basin cleaning and in-house sewer line inspection - should be examined. Both appeared to deviate significantly from our standards.

### **Transportation**

Using Federal Transit Administration (FTA) 1995 reporting information as a base, this was another Department with significant opportunities. The first opportunity is fringe benefits. Our data showed that the way US FTA calculates these, Detroit is incurring an 82.9% level while the panel cities were 55% and the "best" city was 41%. If you could meet the median level, this would cut costs \$18.7 million. You also experience liability and related costs of 0.6% of your budget vs. an average in the panel cities of less than half of that. That difference costs you \$4.8 million. (It must be understood that liability is an area where the impact of changes takes several years to hit the bottom line.) While your staffing in the general and administrative part of the department was on a par with other panel cities, your total costs were about \$4.4 million higher as a percent of total Department budget than other departments. G&A was 46% of bus operations costs, while the panel cities averaged 26-29% and the best was only 16.5%. You also spend proportionally more of your budget on vehicle maintenance operations. (We assessed this factor over several years to assure ourselves that a 1994-5 effort to buy old buses and fix them up was not affecting our comparison). An \$8.2 million difference was identified here. Additionally, if you could achieve a median percentage of your budget devoted to other maintenance costs (facilities, not vehicles); you would be able to move another \$2 million to bus operations. In short, the opportunity may well exist to substantially



increase the resources devoted to actual bus operations, especially if benefit reductions are possible. Even without that, an increase of perhaps 25% might be possible. Note - Because of the inclusion of fringe benefits, it would not be proper to add these items together.

### **Citywide Fringe Benefits**

We have not validated the database from which we based our fringe benefits comparisons, but a recent survey for the City of Columbus Ohio indicated that a panel group of large cities ranged from 20-40%. We did not include this in our initial proposal because we typically validate such information before using it for other cities. However, If Detroit could even reduce its current non-safety rate of 48% to the top of that range, it would be a \$33 million difference. We chose to include this information because it may be useful to you for upcoming negotiations with employee groups. You would need to be validate it by direct conversations and sort out the precise differences by individual component of benefit before the information could be highly useful and reliable.

### **Public Works**

Your goal for stops per day per refuse truck is right on the national average. However, data the department submitted indicated substantially fewer. You may wish to validate the actual number. With one person crews, somewhat fewer stops/day/truck might also be appropriate. Your costs per ton for refuse disposal (as differentiated from collection) are extremely high. We had no data about refuse disposal other than on the transfer station. However, this is a \$72 million cost which the City appears to be stuck with. It seems that your disposal costs are running over \$150/ton versus and urban high average of \$33-36/ton. With a "should take" cost of about \$17 million for disposal of the city's trash, this is a \$55 million extra cost to the taxpayers, and a carry-forward from prior administration decisions.

As with a lot of large eastern and some Midwestern cities, Detroit does not charge a separate fee for residential refuse collection. It does charge a pick-up fee for commercial refuse. It cost you much more than you are charging to collect and dispose of a commercial refuse - we calculate 8 times as much. If you charged this, it would be an extra \$4.7-6.3 million depending on the amount of fringe allocation you elected to apply. Unless you require all commercial refuse to be disposed of at your facility, you are constrained by the market conditions because commercial



users will simply utilize private firms who dump elsewhere if you charge true cost for your operations.

### **Fire Department**

Contrasted with the standards we use, you are understaffed in the area of ambulances and have too many fire trucks. Your first response level for single family residential fires is also very high. A potential reallocation within the Department of at least \$8 million was identified if you wished to change operations to meet our standards. Those standards would change the ratio of trucks to engines from the current 3 trucks per 5 engines to 1 truck per 3 engines. This will be a significant change and not easily accomplished.

Detroit is also averaging a 27% collection rate on its EMS billings. The national average is 45%. This would mean an additional \$4 million in additional revenue if it could be achieved. You should keep in mind that if additional resources are allocated to EMS responses, cost per service unit may be increased in this area.

### **Health**

This is an area where the City's demographics may make some of our panel city comparisons less meaningful or reliable. This is one of the few operational areas in which we utilize "per capita" data because that is the norm in health. Some of the health areas would require us to collect new actual workload data from the panel cities, rather than relying on the per capita information now in our database. From our initial departmental responses, we determined that, even after considering these issues the child health and disability programs, immunization, and vital statistics were probably overstaffed. However, the Health Department later provided us with additional information showing eight times as many immunizations, causing us to drop immunization as an issue. Basically, Health is not on the "top ten" list at this time because we do not have enough meaningful comparative data.

### **Finance**

This department consists of a wide variety of different activities. We believe that there are opportunities for improvement in general accounts, accounts payable, and purchasing to reduce resource allocations to panel city norms. These would equate to \$2.4 million. Two of these



areas - AP and purchasing - are part of the labor-management team process analysis. As you know, the City is also woefully unsuccessful in its property tax collections effort. While other communities average 1-2% uncollected property taxes, Detroit has 9 to 11%. This is 5-10 times as bad as the average city. Bringing it down to the 2% mark would mean \$13.8 million in additional revenue.

### **Human Resources**

Our comparison information showed that the City has more central resources devoted to human resources than most of our panel cities. This however, turned out to be due to the inclusion of payroll administration staff in the central personnel function budget. The key opportunities here are to update the City's position classification system and increase managerial spans of control. The City has too many classes and many of these are rarely if ever used anymore. These include several entry level positions in areas which have experienced so much "grade-creep" over years of low/no salary increases that the entry level position has effectively become the "senior" level class. We found that the City also provides less funding to its employee assistance program than our typical panel city.

### **Cable Commission**

One of our smaller findings came in this comparatively limited area. The City has a commission and in its budgetary thinking ties cable TV rights to the operation of municipal TV and to TV regulation. While this is not rare, most cities have chosen to view cable TV income just as they do all other franchise income - as a pure revenue source. You also have an unused channel which may have a market value to either another public agency or to the franchisee. Changes in this overall area, including eliminating the concept of a commission and trying to market your extra TV channel, might be worth \$3.3 million. You may recall that this was the big "example" used by Indianapolis at the start of competitiveness drive - telling people that they could not understand why the City had ever started operating a "television studio". While we believe that it was, in fact, quite natural for that city or any other to get into the business of producing governmental broadcasts, we understand the point that the public will readily view this as a "waste" area.

### **Municipal Parking**





All of the parking lot operations appear to be contracted out, so we have no staffing analysis for that area. Regarding parking enforcement, the City is writing as many tickets per enforcement FTE as the panel cities, but collecting only about half as much money per FTE. This may point to lower fine rates or to a poor system for collecting on tickets actually written. Additionally, the City appears to be spending half of its total parking fine revenue on the ticket processing contract. We were not clear how this could be as the percentages charged by the processing firm appear to be a lot lower than that. We know of no other city which has collection costs of half of its parking revenue. As you know, the City recently changed to a new software system and contractor. Hopefully this will lead to less processing costs. However, it is also possible that you are simply collecting much less per parking ticket than your peer cities. In that case, processing would be a larger portion of revenues because it is comparatively fixed regardless of the amount per ticket. If you could improve this operation's results to approximate those of other cities, you would either have \$2-3 million more in revenue or \$1 million less in costs.

### **C. Action Plan**

Having identified areas where resource re-allocation may be possible, we need to be very clear that our findings only indicate that you should further examine some of these areas. We are not claiming that the City is overstaffed in any given area - only that the areas identified warrant further analysis because some or all of them may present opportunities for improvement. In our similar Los Angeles study, the more detailed work threw out about 1/3rd of the areas but increased the opportunities in some of the remaining areas. Such items as decisions on fees vs. property taxes are policy decisions, and these probably need more socio-economic impact assessment before you proceed.

We believe that the City should select five to ten specific areas out of the opportunities identified herein and focus exclusively on those until you have resolved them. Criteria for selecting areas for further focus should include the magnitude of the opportunity, the interest of management in addressing the issues raised, and the willingness of your Office and Personnel to work with the department and unions involved in making the improvements work. Selecting too many areas to improve at once is likely to lead to fewer successes than focusing on fewer areas. In determining your selections, it is probably also important to try to include at least one citywide issue, one public safety issue, and one consolidation opportunity. In short, spread the focus areas amongst disparate parts of



City operations if you can. It will be important that a fairly high percentage of your initial focus areas actually lead to improvement so that the stakeholders citywide view the program as something in which they wish to participate. As we have mentioned previously, you will need to create a framework for allocating the benefits of the improvements amongst the competing "beneficiaries" (taxpayers, employees, service recipients, etc.) before you actually make any operational changes based on these studies.

While most opportunities identified fall into one specific department, some of these issues are organization-wide in nature. You may find it useful to develop a small cross-departmental team to examine such areas as fringe benefits, absenteeism, proliferation of classes and other classification issues, compensation, and overly narrow spans-of-control issues.

In conclusion, we would note that our productivity oriented savings opportunities averaged 11% for the departments reviewed. We also noted under-resourced areas that will need some of these resources. In our Los Angeles work we found a somewhat smaller percentage, but not significantly different. Between the revenue areas and the resource reallocations, you have a list which constitutes over 10% of the total budget. This should provide a considerable number of options as you move toward making Detroit a world class city. If you have any questions, call me at (847) 564-9270.

Sincerely,

Michael C. Mount

Attachments

# **Status of Responses and Preliminary Findings Based On 1997-98 Expense Budget for Benchmark Departments**

Department	1998 Budget	% of General Agency Funds	% of Total city Budget	Value of Submitted	Potential Re-Allocations Positions	Dollar Impact	Cost % Impact	Revenue Potential	Comments & Revenue Explanation
<b>General City Agencies</b>									
Police	335,237,867	21.5%	14.2%	14.2%	1,510	66,000,000	19.7%		
Non-Departmental*	231,832,916	14.9%	9.8%	9.8%			15.7%		
Cable					5	3,300,000	-		We looked only at cable
Employee benefits package						33,000,000	-		and fringes.
Department of Public Works	207,406,224	13.3%	8.8%	8.8%	115	6,250,000		4,750,000	<-comm. refuse direct
								23,000,000	<-resid. refuse coll.
								4,000,000	EMS collections.
Fire	137,165,105	8.8%	5.8%	5.8%	210	8,000,000	5.8%		
Planning and Development	86,486,989	5.5%	3.7%						
Health	84,343,913	5.4%	3.6%	3.6%	6	300,000	0.4%		
Recreation	52,624,154	3.4%	2.2%	2.2%					
									Prpty tax collectn rate to
Finance	35,403,846	2.3%	1.5%	1.5%	45	1,800,000	5.1%	13,800,000	median
Buildings & Safety Eng.	21,642,061	1.4%	0.9%	0.9%	48	1,700,000	7.9%		
Human Resources	18,767,809	1.2%	0.8%	0.8%	22	700,000	3.7%		
<b>Total of Above</b>	<b>1,210,900,674</b>	<b>77.8%</b>	<b>51.3%</b>	<b>47.7%</b>	<b>1,961</b>				
<b>Total General City Budget</b>	<b>1,560,290,322</b>								
<b>Enterprise Departments</b>									
D.W.S.D. - Sewerage Disposal	230,476,316	31.0%	9.8%	9.8%	103	36,400,000	8.8%		
D.W.S.D. - Water Supply	182,913,104	24.6%	7.8%	7.8%	588				combined w/sewer
Department of Transportation	154,775,929	20.8%	6.6%	6.6%	72	31,700,000	20.5%		
Municipal Parking	37,469,322	5.0%	1.8%	1.8%	29	1,000,000		2,000,000	
<b>Total of Above</b>	<b>605,634,671</b>	<b>81.4%</b>	<b>25.7%</b>	<b>25.7%</b>	<b>791</b>				
<b>Total Enterprise Budget</b>	<b>743,902,990</b>								
<b>TOTAL Budget</b>	<b>2,355,412,344</b>		<b>77.0%</b>	<b>73.4%</b>	<b>2,752</b>	<b>190,150,000</b>		<b>47,550,000</b>	
(Incl. Debt Service)		Average opportunity on all submitted			<b>16.2%</b>	<b>11.0%</b>		<b>2.7%</b>	

\*The cable commission and some fringes are part of non-departmental, but are the only parts of that budget we examined.